

Remarks

Reconsideration of this Application is respectfully requested.

Claims 24-41 are pending in the application, with claim 24 being the independent claim. Based on the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowable Subject Matter

Applicants acknowledge with appreciation the Examiner's indication that claims 33-35 would be allowable if rewritten in independent form including all of the limitations of their base claim and any intervening claims.

Rejections Under 35 U.S.C. § 102

In the Office Action, claims 24-26 and 36-41 were rejected under 35 U.S.C. §102(e) as being anticipated by Gunter *et al*, U.S. Patent No. 6,751,728 (Gunter). Applicants respectfully traverse this rejection.

To establish a *prima facie* case of anticipation, the Examiner must show that "each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). Gunter does not teach every element of Applicants' independent claim 24.

Gunter describes a method and system for efficiently transmitting encrypted packets between a sending host on an external network and a receiving host on an intranet through a NAP of the intranet. (Gunter, col. 2, lines 35-40). Gunter does not teach or suggest "a distributor unit that distributes a plurality of packets and security information associated with the plurality of packets according to a distribution scheme,"

as recited in independent claim 24. In the Office Action, the Examiner appears to equate either the sending host or the network access point (NAP) 70 of Gunter with a distributor unit. (Office Action, pp. 3, 8). In addition, the Examiner appears to equate the hash value 116 of the packet described in Gunter with security association information. Applicants respectfully disagree with these understandings.

A security association is an agreement between two communicating entities defining information necessary to perform security processing on an in-bound or out-bound IP packet exchanged between the entities. Security association information is retrieved by the transmitting and/or receiving entity for each packet requiring security processing. "The IPSec cryptography protocol specifies two levels of lookup: Policy (Security Policy Database (SPD) lookup) and Security Association (Security Association Database (SAD) lookup). The policy look-up is concerned with determining what needs to be done with various types of traffic, for example, determining what security algorithms need to be applied to a packet, without determining the details, e.g., the keys, etc. The Security Association lookup provides the details, e.g., the keys, etc., needed to process the packet according to the policy identified by the policy lookup." (Specification, p. 11, line 33 - p. 12, line 4). Thus, security association information includes, at a minimum, the protocols used for encrypting and/or authenticating packets exchanged between two entities, and when specified, one or more security processing keys (e.g., encryption keys).

Gunter describes the format of a packet exchanged between a sending host and receiving host through a NAP. Gunter does not teach or suggest that security information is included in a packet. The packet in Gunter includes a source address 108, the NAP address (destination address) 110, payload data 112, cryptographic hash value

116, and the receiving host intranet address 126. (Gunter, FIG. 7). The hash value is a numeric value determined based on the contents of the entire data structure. (Gunter, col. 7, lines 35-36). The protocol used to generate the hash value is known to the sending host and receiving host and is not transmitted with the packet. Thus, no security association information is included in the data packet sent from the sending host to the NAP.

The NAP strips the receiving host intranet address 126 from the packet and replaces the NAP address in the destination field 110 with the receiving host intranet address. (Gunter, col. 8, lines 3-6). The NAP does not retrieve any information related to security processing of the packet. The NAP then forwards the modified packet to the receiving host 66. (Gunter, col. 8, lines 19-21). Thus, no security information is included in the data packet sent from the NAP to the receiving host.

Furthermore, Gunter teaches away from the distribution of security association information associated with each of the plurality of packets by the sending host or the NAP. Specifically, Gunter states "the data portion 112 and the cryptographic hash 116 are then encrypted using a known encryption mechanism ... encryption may use a single key known to both the sending and receiving hosts or the public private key scheme." (Gunter, col. 7, lines 45-50). Gunter therefore teaches that the sending and receiving hosts hold information needed for security processing (encryption protocol, authentication (hash) protocol, and keys). Thus, no distribution is required.

Furthermore, Gunter does not teach or suggest "wherein the plurality of security processing engines receive at least a portion of the security association information associated with the packets, and wherein the plurality of security processing engines

process the plurality of packets in parallel," as recited in independent claim 24. In support of the rejection, the Examiner uses the following passages of Gunter:

When the receiving host receives the modified packet, it decrypts the encrypted portion and authenticates the packet by calculating another hash value based on the addresses and data in the received packet, and comparing this hash value with the hash value included in the packet. (Gunter, Col. 2, lines 4-9).

Other input devices (not shown) may include a microphone, joystick, game pad, satellite dish, scanner, or the like. These and other input devices are often connected to the processing unit 21 through a serial port interface 46 that is coupled to the system bus, but may be connected by other interfaces, such as a parallel port, game port or a universal serial bus (USB). (Gunter, Col. 4, lines 31-35).

As discussed above, Gunter does not teach or suggest the distribution of security association information. Furthermore, Gunter does not teach or suggest a plurality of security processing engines that "process the plurality of packets in parallel," as recited in claim 24. Gunter at most describes security processing performed by a single receiving host. The discussion by Gunter of the use of a parallel port to couple an input device to a processing unit is wholly unrelated to parallel processing of a plurality of packets.

For at least the foregoing reasons, independent claim 24 is patentable over Gunter. Furthermore, for at least these reasons and further in view of their own features, claims 25, 26, and 36-41 which depend from claim 24 are patentable over Gunter. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

Rejections Under 35 U.S.C. § 103
Gunter and Barlow

In the Office Action, claim 27 was rejected under 35 U.S.C. §103(a) as being rendered obvious by Gunter in view of Barlow, *et al*, U.S. Patent No. 6,038,551 (Barlow). Applicants respectfully traverse this rejection.

Claim 27 depends from claim 24. Barlow does not overcome all of the deficiencies of Gunter relative to claim 24 described above. For at least these reasons, and further in view of its own features, claim 27 is patentable over Gunter in view of Barlow. Reconsideration and withdrawal of these grounds of rejection are therefore respectfully requested.

Gunter and Leung

In the Office Action, claims 28-32 were rejected under 35 U.S.C. §103(a) as being rendered obvious by Gunter in view of Leung, *et al*, U.S. Patent No. 6,038,551 (Barlow). Applicants respectfully traverse this rejection.

Claims 28-32 depend from claim 24. Leung does not overcome all of the deficiencies of Gunter relative to claim 24 described above. For at least these reasons, and further in view of their own features, claims 28-32 are patentable over Gunter in view of Leung. Reconsideration and withdrawal of these grounds of rejection are therefore respectfully requested.

Conclusion

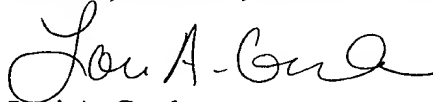
All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the

outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Lori A. Gordon". The signature is fluid and cursive, with the first name "Lori" being more prominent.

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